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Case Docket No. 7343-2 Date: February 1, 2008

Mail Stop Appeals - Patents COMMISSIONER OF PATENTS PO Box 1450 Alexandria, VA 22313-1450

Re:

Application of: Brandel et al

Serial No.: 10/736,119 Filed: December 15, 2003

For: PATTERNED GLASS FIBER TEXTILE

Art Unit: 1771

Examiner: PIZIALI, Andrew T.

Transmitted herewith is/are the following document(s) related to the above-identified application:

| []  | Notice of Appeal        |
|-----|-------------------------|
| [X] | Appeal Brief (20 pages) |

[] Request for Oral Hearing

Please extend the time for filing the Notice of Appeal \_\_\_\_\_ ( ) month to \_\_\_\_\_.

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Attorney Docket No. JM 7343-2

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re Patent Application of        |                             |
|------------------------------------|-----------------------------|
| Lennart J. BRANDEL et al.          | Group Art Unit: 1771        |
| Application No.: 10/736,119        | Examiner: Andrew T. PIZIALI |
| Filed. December 15, 2003           | Confirmation No.: 3619      |
| For: PATTERNED GLASS FIBER TEXTILE | )<br>)<br>)                 |

## SUBSTITUTE APPEAL BRIEF

Mail Stop APPEAL BRIEF - PATENTS Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

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This appeal is from the final Office Action mailed May 21, 2007, and the Advisory Action mailed August 10, 2007, rejecting claims 1-10, which are reproduced as the Claims Appendix of this brief. An Appeal Brief was originally filed October 24, 2007; this Substitute Appeal Brief is filed in response to the Notification of Non-Compliant Appeal Brief mailed January 10, 2008.

## I. Real Party in Interest

Johns Manville is the real party in interest and the assignee of the present application.

# Π. Related Appeals and Interferences

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The Appellant's legal representative, or assignee, does not know of any other appeal or interferences which will affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

## III. Status of Claims

Claims 11-17 having previously been canceled, the final rejection of pending claims 1-10 is hereby appealed.

## IV. Status of Amendments

No claim amendments were filed subsequent to final rejection.

## V. Summary of Claimed Subject Matter

Independent Claim 1 is directed to a woven, patterned glass fiber textile fabric<sup>1</sup> comprised of a glass fiber yarn with a titer of from 270 to 300 tex as the warp<sup>2</sup>, and a glass fiber yarn having a titer ranging from 68 to 660 tex as the weft<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> See, for example, specification, Page 2, Line 27.

<sup>&</sup>lt;sup>2</sup> See, for example, specification, Page 2, Lines 27-29.

<sup>&</sup>lt;sup>3</sup> See, for example, specification, Page 3, Lines 3-4.

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## VI. Grounds of Rejection to be Reviewed on Appeal

- A. Claims 1-9 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over U.S. Patent No. 5,292,578 ("Kölzer").
- B. Claims 1-6 stand rejected under 35 U.S.C. § 102(e) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over U.S. Patent No. 6,667,097 ("Tokarsky").
- C. Claim 10 stands rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Kölzer, and further in view of U.S. Patent No. 3,870,547 ("Workman").
- D. Claims 7, 9, and 10 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Tokarsky, and further in view of U.S. Patent No. 6,337,104 ("Draxo") or 6,759,116 ("Edlund").
- E. Claims 7 and 8 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Tokarsky, and further in view of Moll.
- F. Claims 1-6 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 4,586,934 ("Blalock").
- G. Claims 7, 9, and 10 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Blalock, and further in view of Draxö or Edlund.
- H. Claims 7 and 8 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Blalock, and further in view of Moll.
- I. Claims 1-7, 9, and 10 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Draxö or Edlund in view of Tokarsky.
- J. Claims 7 and 8 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Draxö or Edlund in view of Tokarsky, and further in view of Moll.
- K. Claims 1-7, 9, and 10 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Draxö or Edlund in view of Blalock.
- L. Claims 7 and 8 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Draxö or Edlund in view of Blalock, and further in view of Moll.

## VII. Argument

## A. Claims 1-9 stand rejected in view of Kölzer

Kölzer is cited as disclosing

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a woven (patterned) glass fiber textile fabric comprised of a glass fiber yarn with a titer of from about 34 to about 1000 tex, preferably 272 tex, as the warp, and a glass fiber yarn having a titer ranging from about 68 to about 1200 tex, preferably from about 136 to about 900 tex, as the weft (see entire document including column 4, line 26 through column 5, line 31).

(Final Office Action, Page 2). The final Office Action continues,

In the event that it is shown that the applied prior art does not disclose the claimed warp and weft titer with sufficient specificity, the invention is obvious because it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the warp and weft titer to within the claimed ranges, because it is understood by one of ordinary skill in the art that the titer determines properties such as strength of the fabric, depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

(Final Office Action, Page 3).

Kölzer is directed to the preparation of reinforced plastics containing a woven fabric as reinforcement, the fabric having expandable microspheres dispersed within the thread system of the fabric. When the microspheres are expanded by heating, the weft threads (covered) shrink slightly while the warp (covering) threads shrink substantially.

The present claims are broadly directed to a woven, patterned glass fiber textile composed of a glass fiber warp yarn of a titer of 270 to 300 tex and a glass fiber weft yarn of a titer of 68 to 660 tex. It has been discovered by the Appellants that a woven glass fiber fabric can be manufactured with a patterned weave if the warp and weft yarns have a titer within the ranges recited in the present claims. This is quite surprising since the prior art has taught that Jacquard woven, patterned glass fiber fabrics can only be produced on a pattern-controlled Jacquard loom if the warp yarn density is tightly controlled to be in the range of 130 to 150 tex, preferably 139 to 142 tex. (See U.S. Patent No. 6,267,151 ("Moll") at Column 1, Lines 20-30).

If claims are directed to a narrow range, and a reference teaches a broad range, depending on the other facts of the case, it may be reasonable to conclude that the narrow range is not disclosed with "sufficient specificity" to constitute an anticipation of the claims. See, e.g., Atofina v. Great Lakes Chem. Corp., 441 F.3d 991, 999, 78 USPQ2d 1417, 1423 (Fed. Cir. 2006). Any evidence of unexpected results within the narrow range may also render the claims unobvious. MPEP § 2131.03.

The Examiner asserts that the Appellants were "concerned with providing [a woven] glass fiber textile with increased strength", referring to page 4, lines 3-8, of the present specification. (Final Office Action, Page 16). Appellants respectfully traverse this assertion, and point out that page 4, lines 3-8, of the present specification states,

Once the patterned glass fiber textile has been woven on the Jacquard loom, the textile can be used as is, or is preferably coated/impregnated in conventional fashion to provide the final characteristics of the product. Chemical treatments of glass fabrics are known to finalize/adjust such characteristics as strength, volume, stability and opacity of the final textile product. Any such chemical treatments can be employed with regard to the glass fiber textile of the present invention.

Rather than being concerned with providing a woven glass fiber textile with increased strength, Appellants were concerned with woven, patterned glass fiber textiles that are aesthetically pleasing.

"In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992); MPEP § 2141.01(a).

Applicants respectfully submit that Kölzer is neither in the field of Applicants' endeavor nor reasonably pertinent to the particular problem with which the inventor was concerned, which is woven, patterned glass fiber textiles that are aesthetically pleasing. Thus, Kölzer may not be relied on as a basis for rejection of Applicants' invention.

Since Kölzer is directed to fiber reinforcement of plastics, the desirable characteristics of decorative textiles (e.g., patterns which appeal to consumers, flexibility, fineness, appearance, etc.) are not a consideration. A high titer may provide increased strength which is a desirable characteristic for reinforcement, but not necessarily a desirable characteristic for decorative woven fabrics.

The Examiner asserts that "a woven fiber design is a pattern." (Final Office Action, Page 16). Appellants respectfully traverse this assertion. Rather than a woven fiber design being a pattern, glass fabrics can be woven with a pattern. (See Page 1, Line 19, of the present specification). Further, as explained on page 1, line 30 – page 2, line 1, of the present specification, "The importance of aesthetics in commercial products . . . require that more flexibility is provided in creating patterns in woven glass textile fabrics." (Emphasis Added).

Appellants point out that claim 1 is directed to a "woven, patterned glass fiber textile fabric". (Emphasis Added). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970); MPEP § 2143.03.

Appellants respectfully submit that claim 1 is not anticipated as each and every element as set forth in the claim is not disclosed by Kölzer and that Kölzer does not disclose or suggest all the claim limitations. In particular, Kölzer does not disclose a woven, patterned glass fiber textile fabric comprised of a glass fiber yarn with a titer of from 270 to 300 tex as the warp, and a glass fiber yarn having a titer ranging from 68 to 660 tex as the weft.

Claims 2-9 depend, or ultimately depend, from claim 1, and thus, contain all the limitations of claim 1. In view of the above, the rejection of claims 1-9 under 35 U.S.C. § 102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over Kölzer should be reversed.

# B. Claims 1-6 stand rejected in view of Tokarsky

Tokarsky is cited as disclosing

a woven (patterned) glass fiber textile fabric comprised of a glass fiber yarn with a titer of from about 30 to 5000 dernier (3 to 556 tex) as the warp and weft (see entire document including column 17, lines 16-42, the paragraph bridging columns 17 and 18, and the paragraph bridging columns 36 and 37).

(Final Office Action, Page 4). The final Office Action continues,

In the event that it is shown that the applied prior art does not disclose the claimed warp and weft titer with sufficient specificity, the invention is obvious because it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the warp and weft titer to within the claimed ranges, because it is understood by one of ordinary skill in the art that the titer determines properties such as strength of the fabric, depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has

been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

(Final Office Action, Page 4).

Tokarsky concerns melt spinning high viscosity fluoropolymers into single filaments or multi-filament yarns at high spinning speeds, the melt spinning being carried out at a temperature which is at least 90°C greater than the melting point of the polymer or in the case of perfluoropolymer, at a temperature of at least 450°C, and the yarns produced by the process, wherein the filaments can exhibit an orientation at the surface of the filament no greater than at the core of the filament. (Abstract).

Applicants respectfully submit that Tokarsky is neither in the field of Applicants' endeavor nor reasonably pertinent to the particular problem with which the inventor was concerned, which is woven, patterned glass fiber textiles that are aesthetically pleasing. Thus, the fluoropolymer fibers of Tokarsky may not be relied on as a basis for rejection of Applicants' invention.

Again, the Examiner asserts that "a woven fiber design is a pattern." (Final Office Action, Page 18). Appellants respectfully traverse this assertion. Rather than a woven fiber design being a pattern, glass fabrics can be woven with a pattern. (See Page 1, Line 19, of the present specification). Further, as explained on page 1, line 30 – page 2, line 1, of the present specification, "The importance of aesthetics in commercial products... require that more flexibility is provided in creating patterns in woven glass textile fabrics." (Emphasis Added).

Appellants further respectfully submit that claim 1 is not anticipated as each and every element as set forth in the claim is not disclosed by Tokarsky and that Tokarsky does not disclose or suggest all the claim limitations. In particular, Tokarsky does not disclose a woven, *patterned* glass fiber textile fabric comprised of a glass fiber yarn with a titer of from 270 to 300 tex as the warp, and a glass fiber yarn having a titer ranging from 68 to 660 tex as the weft. Rather, Tokarsky merely discloses fluoropolymer multi-filament yarn generally having a denier of 30 to 5000. (Column 17, Lines 31-35).

Claims 2-6 depend from claim 1, and thus, contain all the limitations of claim 1. In view of the above, the rejection of claims 1-6 under 35 U.S.C. § 102(b) as allegedly

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anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over Tokarsky should be reversed.

C. Claim 10 stands rejected in view of Kölzer, and further in view of Workman

Claim 10 recites, "The glass textile fabric of claim 1, wherein the textile is

impregnated with a chemical formulation comprised of a starch binder and a polymeric
binder."

Workman is cited as disclosing "that it is known in the glass fiber reinforced art to impregnate a glass fiber fabric with a binder comprising polymer and starch components". (Final Office Action, Page 5).

Workman fails to cure the above noted deficiencies of Kölzer, with respect to Claim 1. Accordingly, Appellant respectfully submits that Claim 10 is patentable over Kölzer and Workman for at least the same reasons as those discussed above regarding the rejection of claims 1-9 under 35 U.S.C. § 102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over Kölzer.

D. Claims 7. 9, and 10 stand rejected in view of Tokarsky, and further in view of Draxo or Edlund

Claim 7 recites, "The glass textile fabric of claim 1, wherein the warp density of the textile fabric ranges from 2.5 to 20 threads/cm," Claim 9 recites, "The glass textile fabric of claim 1, wherein the west yarn density of the textile fabric is in the range of from about 2.0 to 12 threads/cm," and Claim 10 recites, "The glass textile fabric of claim 1, wherein the textile is impregnated with a chemical formulation comprised of a starch binder and a polymeric binder."

Draxö and Edlund are cited as each providing a "conventional teaching showing that it is known in the woven wall covering art to use a warp density of 3.15 to 3.4 threads/cm". (Final Office Action, Page 6).

Draxö or Edlund fails to cure the above noted deficiencies of Tokarsky, with respect to Claim 1. Accordingly, Appellant respectfully submits that Claims 7, 9, and 10 are patentable over Tokarsky and Draxö or Edlund for at least the same reasons as those discussed above regarding the rejection of claims 1-6 under 35 U.S.C. § 102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over Tokarsky.

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#### E. Claims 7 and 8 stand rejected in view of Tokarsky, and further in view of Moll

Claim 7 recites, "The glass textile fabric of claim 1, wherein the warp density of the textile fabric ranges from 2.5 to 20 threads/cm," and Claim 8 recites, "The glass textile fabric of claim 7, wherein the warp density of the textile fabric is in the range of from about 6 to 10 threads/cm."

Moll is cited as providing a "conventional teaching showing that it is known in the wall covering art to use warp densities of between 4 and 10 threads/cm". (Final Office Action, Page 7).

It is improper to combine references where the references teach away from their combination. In re Grasselli, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983); MPEP § 2145.

Moll clearly teaches away from exceeding the upper limit of 150 tex (± less than 10%) and discloses that that patterned glass fabrics "can be produced after all by adhering to the above-addressed limiting values". (Emphasis Added; Column 1, Lines 44-49). Thus, the proposed combination of Moll with Tokarsky is improper, as Moll teaches away from exceeding the upper limit of 150 tex.

Moreover, Moll fails to cure the above noted deficiencies of Tokarsky, with respect to Claim 1. Accordingly, Appellant respectfully submits that Claims 7 and 8 are patentable over Tokarsky and Moll for at least the same reasons as those discussed above regarding the rejection of claims 1-6 under 35 U.S.C. § 102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over Tokarsky.

#### F. Claims 1-6 stand rejected in view of Blalock

Blalock is cited as disclosing "a woven (patterned) glass fiber textile fabric comprised of a glass fiber yarn with a titer of 333 or 666 tex as the warp and weft (see entire document including column 2, lines 49-59, column 5, lines 18-33, and Example 1)." (Final Office) Action, Page 8). The final Office Action continues.

Although Blalock does not specifically mention a warp and west yarn titer of from 270 to 300 tex, absent a showing of unexpected results from use of a titer of from 270 to 300 tex as the warp, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer of the warp and west fiber, such as from 270 to 300 tex, because it is understood by one of ordinary skill in the art that the titer determines properties such as strength of the fabric, depth of pile, degree of loft of the loops, and appearance

of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

(Final Office Action, Page 8).

Blalock discloses a method and apparatus for producing textile yarns so that one surface of the yarn exhibits a visually perceptive darker color hue when compared to another surface of the yarn. (Abstract). Rather than disclosing a "fabric comprised of a glass fiber yarn with a titer of 333 or 666 tex as the warp and weft" (emphasis added), Blalock actually discloses that particularly preferred yarns include glass sliver yarns, and that "[a] particularly suitable glass sliver yarn is identified as 666 TEX and is manufactured by The Schuller Company in Europe" and that "[a]nother suitable glass sliver yarn is 333 TEX". (Column 5, Lines 18-33).

The Examiner asserts that the disclosure of Blalock "that the 333 TEX yarn has a diameter about one-half the size of the 666 TEX yarn ... "clearly teaches that TEX is referring to the titer." Appellants respectfully traverse this assertion as unsound and unsupported. (Final Office Action, Page 18).

Appellants respectfully submit that Blalock does not disclose or suggest all the claim limitations. In particular, Blalock does not disclose a woven, patterned glass fiber textile fabric comprised of a glass fiber yarn with a titer of from 270 to 300 tex as the warp, and a glass fiber yarn having a titer ranging from 68 to 660 tex as the weft. Rather, Blalock merely discloses a glass sliver yarn identified as 666 TEX or 333 TEX.

Claims 2-6 depend from claim 1, and thus, contain all the limitations of claim 1. In view of the above, the rejection of claims 1-6 under 35 U.S.C. § 103(a) as allegedly obvious over Blalock should be reversed.

G. Claims 7, 9, and 10 stand rejected in view of Blalock, and further in view of Draxö or Edlund

Claim 7 recites, "The glass textile fabric of claim 1, wherein the warp density of the textile fabric ranges from 2.5 to 20 threads/cm," Claim 9 recites, "The glass textile fabric of claim 1, wherein the west yarn density of the textile fabric is in the range of from about 2.0 to 12 threads/cm," and Claim 10 recites, "The glass textile fabric of claim 1, wherein the textile is impregnated with a chemical formulation comprised of a starch binder and a polymeric binder."

Draxö and Edlund are cited as each providing a "conventional teaching showing that it is known in the woven wall covering art to use a warp density of 3.15 to 3.4 threads/cm". (Final Office Action, Page 9).

Draxô or Edlund fails to cure the above noted deficiencies of Blalock, with respect to Claim 1. Accordingly, Appellant respectfully submits that Claims 7, 9, and 10 are patentable over Blalock and Draxô or Edlund for at least the same reasons as those discussed above regarding the rejection of claims 1-6 under 35 U.S.C. § 103(a) as allegedly obvious over Blalock.

H. Claims 7 and 8 stand rejected in view of Blalock, and further in view of Moll Claim 7 recites, "The glass textile fabric of claim 1, wherein the warp density of the textile fabric ranges from 2.5 to 20 threads/cm," and Claim 8 recites, "The glass textile fabric of claim 7, wherein the warp density of the textile fabric is in the range of from about 6 to 10 threads/cm."

Moll is cited as providing a "conventional teaching showing that it is known in the wall covering art to use warp densities of between 4 and 10 threads/cm". (Final Office Action, Page 11).

Moll fails to cure the above noted deficiencies of Blalock, with respect to Claim 1. Accordingly, Appellant respectfully submits that Claims 7 and 8 are patentable over Blalock and Moll for at least the same reasons as those discussed above regarding the rejection of claims 1-6 under 35 U.S.C. § 103(a) as allegedly obvious over Blalock.

I. <u>Claims 1-7, 9, and 10 stand rejected in view of Draxö or Edlund in view of Tokarsky</u>

Draxö and Edlund are cited as each disclosing "a woven patterned glass fiber textile fabric comprised of a glass fiber yarn with a titer of 139 to 142 tex as the warp, and a glass fiber yarn having a titer ranging from 165 to 550 tex as the weft (see entire documents including column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund)." (Final Office Action, Page 11). The final Office Action continues,

Draxo and Edlund each disclose that many glass fiber yarns may be selected for use when producing the woven materials, but neither appears to specifically mention a titer of from 270 to 300 tex as the warp. Tokarsky, however, discloses that it is known in the woven wall covering art (paragraph bridging columns 17 and 18, column 44, lines 55-65, and column 45, lines 35-47) to vary the denier (tex) of a fabric from 30 to 5000 (column 17, 17-42). Absent a showing of unexpected results from use of a titer of from 270 to 300

tex as the warp, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer of the warp and weft fiber, such as from 270 to 300 tex, because it is understood by one of ordinary skill in the art that the titer determines properties such as strength of the fabric, depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

(Final Office Action, Pages 11-12).

As noted above, Applicants respectfully submit that Tokarsky is neither in the field of Applicants' endeavor nor reasonably pertinent to the particular problem with which the inventor was concerned, which is woven, patterned *glass* fiber textiles that are aesthetically pleasing. Thus, the *fluoropolymer* fibers of Tokarsky may not be relied on as a basis for rejection of Applicants' invention.

As also noted above, Tokarsky does not disclose a glass fiber yarn with a titer of from 270 to 300 tex as the warp, and a glass fiber yarn having a titer ranging from 68 to 660 tex as the weft. Rather, Tokarsky merely discloses fluoropolymer multi-filament yarn generally having a denier of 30 to 5000. (Column 17, Lines 31-35).

Applicants respectfully submit that those of ordinary skill in the art seeking to modify the woven fabrics of Draxö and Edlund would not have been motivated to look to the fluoropolymer fibers of Tokarsky. Applicants further respectfully submit that there would not have been a reasonable expectation of success in so modifying the textiles of Draxö and Edlund.

The Examiner further asserts,

It would have been obvious to one having ordinary skill in the art at the time the invention was made to increase the titer, because some applicants are more concerned with a higher strength of the fabric, a higher depth of pile, and/or a high degree of loft of the loops, as opposed to a decrease in flexibility.

(Final Office Action, Page 20). Appellants point out that Draxö or Edlund are concerned with decorative fabrics which are flexible and have a decorative appeal to consumers. Therefore, there would have been no motivation to increase the stiffness and therefore reduce the fineness of the fabrics of Draxö or Edlund.

Claims 2-7, 9, and 10 depend from claim 1, and thus, contain all the limitations of claim 1. In view of the above, the rejection of claims 1-7, 9, and 10 under 35 U.S.C. § 103(a) as allegedly obvious over Draxö or Edlund in view of Tokarsky should be reversed.

# J. <u>Claims 7 and 8 stand rejected in view of Draxö or Edlund in view of Tokarsky, and further in view of Moll</u>

Claim 7 recites, "The glass textile fabric of claim 1, wherein the warp density of the textile fabric ranges from 2.5 to 20 threads/cm," and Claim 8 recites, "The glass textile fabric of claim 7, wherein the warp density of the textile fabric is in the range of from about 6 to 10 threads/cm."

Again, Appellants point out that Draxo or Edlund are concerned with decorative fabrics which are flexible and have a decorative appeal to consumers. Therefore, there would have been no motivation to increase the stiffness and therefore reduce the fineness of the fabrics of Draxo or Edlund.

As noted above, Applicants respectfully submit that Tokarsky is neither in the field of Applicants' endeavor nor reasonably pertinent to the particular problem with which the inventor was concerned, which is woven, patterned *glass* fiber textiles that are aesthetically pleasing. Thus, the *fluoropolymer* fibers of Tokarsky may not be relied on as a basis for rejection of Applicants' invention.

As also noted above, Tokarsky does not disclose a glass fiber yarn with a titer of from 270 to 300 tex as the warp, and a glass fiber yarn having a titer ranging from 68 to 660 tex as the weft. Rather, Tokarsky merely discloses fluoropolymer multi-filament yarn generally having a denier of 30 to 5000. (Column 17, Lines 31-35).

Applicants respectfully submit that those of ordinary skill in the art seeking to modify the woven fabrics of Draxö and Edlund would not have been motivated to look to the fluoropolymer fibers of Tokarsky. Applicants further respectfully submit that there would not have been a reasonable expectation of success in so modifying the textiles of Draxö and Edlund.

Moll fails to cure the above noted deficiencies of Draxö or Edlund and Tokarsky, with respect to Claim 1. Accordingly, Appellant respectfully submits that Claims 7 and 8 are patentable over Draxö or Edlund, Tokarsky, and Moll for at least the same reasons as those discussed above regarding the rejection of claims 1-7, 9, and 10 under 35 U.S.C. § 103(a) as allegedly obvious over Draxō or Edlund in view of Tokarsky.

# K. Claims 1-7, 9, and 10 stand rejected in view of Draxö or Edlund in view of Blalock

Draxö and Edlund are cited as each disclosing "a woven patterned glass fiber textile fabric comprised of a glass fiber yarn with a titer of 139 to 142 tex as the warp, and a glass fiber yarn having a titer ranging from 165 to 550 tex as the weft (see entire documents including column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund)." (Final Office Action, Page 13). The final Office Action continues,

Draxo and Edlund each disclose that many glass fiber yarns may be selected for use when producing the woven materials, but neither appears to specifically mention a titer of from 270 to 300 tex as the warp. Blalock, however, discloses that it is known in the woven wall covering art (column 1, lines 15-25) to use a glass fiber yarn with a titer of up to 666 tex (specific reference is made of 333 tex and 666 tex, se column 5, lines 18-33 and Example 1). Absent a showing of unexpected results from use of a titer of from 270 to 300 tex as the warp, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer of the warp and weft fiber, such as from 270 to 300 tex, because it is understood by one of ordinary skill in the art that the titer determines properties such as strength of the fabric, depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

(Final Office Action, Pages 13-14).

As noted above, Blalock does not disclose a glass fiber yarn with a titer of from 270 to 300 tex as the warp, and a glass fiber yarn having a titer ranging from 68 to 660 tex as the weft. Rather, Blalock discloses that particularly preferred yarns include glass sliver yarns, and that "[a] particularly suitable glass sliver yarn is identified as 666 TEX and is manufactured by The Schuller Company in Europe" and that "[a]nother suitable glass sliver yarn is 333 TEX". (Column 5, Lines 18-33).

Appellants respectfully submit that those of ordinary skill in the art seeking to modify the woven fabrics of Draxö and Edlund would not have been motivated to look to the yarns of Blalock. Appellants further respectfully submit that there would not have been a reasonable expectation of success in so modifying the textiles of Draxö and Edlund.

Again, Appellants point out that Draxo or Edlund are concerned with decorative fabrics which are flexible and have a decorative appeal to consumers. Therefore, there would have been no motivation to increase the stiffness and therefore reduce the fineness of the fabrics of Draxo or Edlund.

Claims 2-7, 9, and 10 depend from claim 1, and thus, contain all the limitations of claim 1. In view of the above, the rejection of claims 1-7, 9, and 10 under 35 U.S.C. § 103(a) as allegedly obvious over Draxö or Edlund in view of Blalock should be reversed.

L. <u>Claims 7 and 8 stand rejected in view of Draxö or Edlund in view of Blalock,</u> and further in view of Moll

Claim 7 recites, "The glass textile fabric of claim 1, wherein the warp density of the textile fabric ranges from 2.5 to 20 threads/cm," and Claim 8 recites, "The glass textile fabric of claim 7, wherein the warp density of the textile fabric is in the range of from about 6 to 10 threads/cm."

Moll is cited as providing a "conventional teaching showing that it is known in the wall covering art to use warp densities of between 4 and 10 threads/cm". (Final Office Action, Page 15).

Again, Appellants point out that Draxö or Edlund are concerned with decorative fabrics which are flexible and have a decorative appeal to consumers. Therefore, there would have been no motivation to increase the stiffness and therefore reduce the fineness of the fabrics of Draxö or Edlund.

Moll fails to cure the above noted deficiencies of Draxö or Edlund and Blalock, with respect to Claim 1. Accordingly, Appellant respectfully submits that Claims 7 and 8 are patentable over Draxö or Edlund, Blalock, and Moll for at least the same reasons as those discussed above regarding the rejection of claims 1-7, 9, and 10 under 35 U.S.C. § 103(a) as allegedly obvious over Draxö or Edlund in view of Blalock.

## VIII. Claims Appendix

See attached Claims Appendix for a copy of the claims involved in the appeal.

## IX. Evidence Appendix

See attached Evidence Appendix for copies of evidence relied upon by Appellant.

# X. Related Proceedings Appendix

See attached Related Proceedings Appendix for copies of decisions identified in Section  $\Pi$ ., supra.

Respectfully submitted,

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Date February 1, 2008

By:

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## VIII. CLAIMS APPENDIX

## The Appealed Claims

- 1. A woven, patterned glass fiber textile fabric comprised of a glass fiber yarn with a titer of from 270 to 300 tex as the warp, and a glass fiber yarn having a titer ranging from 68 to 660 tex as the weft.
- 2. The glass textile fabric of claim 1, wherein the titer of the warp yarn is in the range of from about 270 to 290 tex.
- 3. The glass textile fabric of claim 1, wherein the titer of the warp yarn is about 278 tex.
- 4. The glass textile fabric of claim 1, wherein the titer of the west yarn is in the range of from 190 to 350 tex.
- 5. The glass textile fabric of claim 1, wherein the titer of the west yarn is about 200 tex.
- 6. The glass textile fabric of claim 1, wherein the titer of the west yarn is about 330 tex.
- 7. The glass textile fabric of claim 1, wherein the warp density of the textile fabric ranges from 2.5 to 20 threads/cm.
- 8. The glass textile fabric of claim 7, wherein the warp density of the textile fabric is in the range of from about 6 to 10 threads/cm.
- 9. The glass textile fabric of claim 1, wherein the west yarn density of the textile sabric is in the range of from about 2.0 to 12 threads/cm.
- 10. The glass textile fabric of claim 1, wherein the textile is impregnated with a chemical formulation comprised of a starch binder and a polymeric binder.

## Claims Appendix - 1

IX. EVIDENCE APPENDIX

NONE

# X. RELATED PROCEEDINGS APPENDIX

NONE